



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/075,552

02/13/2002

Ryuji Biro

1232-4819

8407

27123 7590 08/13/2007
MORGAN & FINNEGAN, L.L.P.
3 WORLD FINANCIAL CENTER
NEW YORK, NY 10281-2101

EXAMINER

LU, JIPING

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

08/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

EP

Office Action Summary	Application No. 10/075,552	Applicant(s) BIRO ET AL.	
	Examiner Jiping Lu	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims Status

1. Claims 1-33 have been canceled. Claims 34-37 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/10/07 has been entered.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 34, 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugata (U. S. Pat. 6,896,973) in view of Mukai (U.S. Pat. 5,120,394).

Sugata shows a rinsing method comprising the steps of accommodating an article 2, to be rinsed, into a second container 1 which is disposed inside a first container (room used to house the container 1), introducing an oxygen gas 4 into the second container 1, irradiating the article with ultraviolet rays from a light source 11, and introducing a nitrogen gas 5 into the second container 1 and exhausting the oxygen gas 9 in the second container to exchange an ambience of the second container same as claimed. However, Sugata does not show the light source disposed

Art Unit: 3749

inside the first container but outside the second container. Mukai shows a process by placing an article 11 to be rinsed in an inner container 2 (2nd container), adding gas 15-24 into the second container 2, irradiating the article 11 with ultraviolet rays 12 from a light source 3 outside of the second container 2 and introducing N₂ gas 8, 9 into the second container 2. The examiner has considered the room that housing the apparatus (Fig. 1) is the outer container or 1st container. Therefore, it would have been obvious to one skill in the art at the time the invention was made to modify the method of Sugata to irradiating the article with ultraviolet rays from a light source disposed inside the first container but outside the second container as taught by Mukai in order to pursue an intended use. With regard to the claimed material of the article to be cleaned, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the article with any kind of material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

5. Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamiya (U.S. Pat. 4,989,031) in view of Mukai (U.S. Pat. 4,989,031) and Kuzumoto et al. (U. S. Pat. 6,616,773).

Kamiya shows a rinsing method comprising providing a first container I, a light emitting unit 1, 11, 12 disposed inside the first container I for emitting laser lights, a second container II, III disposed inside the first container I and being adapted to accommodate an article 2, 4 to be rinsed, the second container II, III having a clearance through the first container I (see Fig. 1), a first gas supplying means 31, 32 for introducing a rinsing gas into the second container II, III to maintain an ambience of the second container which ambience is different from that of

Art Unit: 3749

the first container and also to keep an internal pressure higher than that of the first container I (col. 4, lines 18-25). However, Kamiya does not show irradiating the article with ultraviolet rays and introducing a nitrogen gas into the second container and exhausting the oxygen gas or ozone gas in the second container to exchange an ambience of the second container.. Mukai teaches a concept of using ultraviolet light generator for irradiating a laser ray (wavelength: 193 nm) over the surface of substrate 11 (col. 5, lines 6-9) and introducing N₂ gas 8, 9 into the inner (second) container. Kuzumoto et al. teach a concept of introducing a nitrogen gas into the second container 1 and exhausting the oxygen gas or ozone gas in the second container to exchange an ambience of the second container (col. 2, lines 33-36 and Fig. 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify method of Kamiya to include a step of supplying ultraviolet rays as taught by Mukai and a step of introducing a nitrogen gas to the second container for replacing the oxygen gas or ozone gas in the second as taught by Kuzumoto et al. in order to more efficiently clean the articles inside the second container. With regard to the claimed material of the article to be cleaned, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the article with any kind of material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Response to Arguments

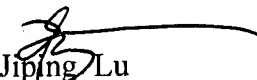
6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEVEN B. MCALLISTER can be reached on 571 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jiping Lu
Primary Examiner
Art Unit 3749

J. L.